

# Tug Hill Tomorrow Land Trust Bird Quest

Subject Area /Level Elementary Science, 3-5 Grade

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## I. Learning goals/Objectives

- Discuss and understand that feathers are distinguishable features of birds that separate them from other types of animals
- Discuss and understand different types of feathers all birds have
- Discuss and understand two major functions of feathers for birds
- Discuss and understand different types of birds categorized by common habitat, diet, body and bill shapes, and lifestyle
- Begin to make connections between habitat and types of birds that will be observed

## II. NYS Standards

Elementary Science Core Curriculum  
Standard 1- Analysis, Inquiry, and Design  
Scientific Inquiry: Key Idea 1  
S1.1a & b  
S1.2a  
S1.3a  
Elementary Science Core Curriculum  
Standard 4- The Living Environment  
Key Idea 3: Performance Indicator 3.1a & c

## III. Anticipatory Set/Engage/Pre-assess

- The Tug Hill Tomorrow Land Trust and the Bird Quest Program will be introduced to the students

## IV. Procedures / Instructional Strategies (Explore, Explain, Elaborate, Extend)

- After the introduction, the question "What is a bird?" will be asked to the students
- All of the students will raise their hand to answer and the answers will be written at the front of the room
- After about a minute, the discussion will be narrowed to simply: A bird is an animal that has feathers
- Students will learn that feathers are made up of keratin, the same protein found in hair and fingernails
- Students will be given a down feather, a flight feather, and a straw
- Next, students will learn about the two main types of feathers found on birds through discussion, visuals, and bird feathers
  - Flight feathers
  - Down Feathers

- The students will be asked, "What is the function of feathers? What do they help the bird do?"
- All of the students will raise their hand to answer and the answers will be written at the front of the room
- After a minute, the two major functions of feathers on birds will be introduced and discussed
  - o Flight
  - o Warmth
- Functions of plumage, all of the feathers on a bird, will be introduced and discussed
  - o Age
  - o Sex
  - o Camouflage
- Other important characteristics of birds will also be discussed
  - o Hollow Bones
  - o Furcula
  - o Beaks
  - o Gizzard
  - o Hard-shelled eggs
- Statistics of total species of birds and all of the species of birds within Tug Hill will be discussed
- Broad grouping of birds based on diet, habitat, body and bill shapes, and lifestyle will be introduced and discussed
  - o Raptors
  - o Gallinaceous Birds
  - o Waterfowl
  - o Waterbirds and Shorebirds
  - o Perching Birds
- The discussion will conclude with "What birds will you see?"
- A few students can contribute to this question by raising their hand
  - o This can be used as a possible gauge of what the students are expecting to observe based on prior knowledge individual students may already have about specific species of birds.

**V. Closure**

- Students will be given their birdseed, feeders, and complementary materials

**VI. Assessment (list all and when used)**

- Assessment opportunities can be pursued by the classroom teacher

**VII. Differentiated Instruction**

- PowerPoint with words and pictures
- Verbal presentation
- Specimens the students can see and touch
- Group discussion
- Class participation

**SAFETY**

- Observing the students throughout the entire lesson will prevent injury and safety issues

**Materials/Resources**

- PowerPoint
- Specimens
- Bird Quest materials
- Accompanying worksheets
- The Tug Hill Classroom Wildlife Curriculum: Unit 2- Birds
- Tug Hill: A Four Season Guide to the Natural Side

**Modifications**

- Modifications can be made depending upon grade level and specific vocabulary requests by classroom teacher